

MAY 22 2007

Application No.: 10/827,528

Docket No.: 200400478-2 (1509-500)

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1. (Currently Amended): A method ~~for creating to create~~ data transformation routines for binary data ~~for transforming to transform~~ said data from a source format to a target format, the method comprising the steps of:
 - a) generating a source model of a source format element;
 - b) generating a target model of a target format element;
 - c) generating a mapping between said source model and said target model;
 - d) generating a transformation routine based on said mapping for extracting data from said source element and depositing said data in said target element.
2. (Currently Amended): A method according to claim 1 in which target models ~~are generated for generate~~ a plurality of target elements and a mapping generated between the source model and said plurality of target models.
3. (Currently Amended): A method according to claim 1 in which source models ~~are generated for generate~~ a plurality of source elements and a mapping generated between said plurality of source models and said target model.
4. (Currently Amended): A method according to claim 1 in which said transformation routine is arranged ~~for transforming to transform~~ data in software code instructions from a source format code to a target format code and said routines are generated in said target format code.
5. (Original): A method according to claim 1 in which the mapping accounts for differences in endianness between the source and target models.
6. (Original): A method according to claim 4 in which the transformation routine is executed at the runtime of a program in said source code.
7. (Currently Amended): A method according to claim 1 in which said target and source

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models relate bit positions to variable names for any given instruction.

8. (Original): A method according to claim 1 in which a group of source models and target models are provided wherein one or more models are applicable to a plurality of respective source or target instructions.
9. (Original): A method according to claim 4 in which said transformation routine is associated with a template providing a set of target format instructions semantically equivalent to said identified source instruction.
10. (Currently Amended): A method according to claim 1 in which the transformation routine is arranged for transforming to transform data from a database between a source database format to a target database format.
11. (Currently Amended): A computer apparatus including a binary translator to create~~Apparatus for creating data~~ transformation routines for transforming to transform data from a source format to a target format, the apparatus comprising:
 - a) a source model of a source element;
 - b) a target model of a target element;
 - c) a mapping between said source model and said target model;
 - d) a routine generator for generating a transformation routine based on said mapping for extracting data from said source element and depositing said data in the target element.
12. (Original): Apparatus according to claim 11 further comprising target models for a plurality of target elements and a mapping between the source model and said plurality of target models.
13. (Original): Apparatus according to claim 11 further comprising source models for a plurality of source elements and a mapping between said plurality of source models and said target model.
14. (Currently Amended): A method according to claim 11 in which said transformation routine is arranged for transforming to transform data in software code instructions from a source format code to a target format code and said routines are generated in said target format code.

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15. (Original): Apparatus according to claim 11 in which the mapping accounts for differences in endianness between the source and target models.
16. (Original): Apparatus according to claim 14 in which the transformation routine is executed at the runtime of a program in said source code.
17. (Original): Apparatus according to claim 11 in which said models relate bit positions to variable names for any given instruction.
18. (Original): Apparatus according to claim 11 in which a group of source models and target models are provided wherein one or more models are applicable to a plurality of respective source or target instructions.
19. (Original): Apparatus according to claim 14 in which said transformation routine is associated with a template providing a set of target format instructions semantically equivalent to said identified source instruction.
20. (Original): Apparatus according to claim 11 in which the transformation routine is arranged for transforming data from a database between a source database format to a target database format.
21. (Currently Amended): A computer program ~~for transforming~~ embedded in a computer-readable medium to transform data from a source instruction to a target instruction, in accordance with the method of claim 1
22. (Original): A computer program according to claim 21 in which said transformation routines are implemented as routines in said computer program.
23. (Original): A computer program according to claim 21 operable to carry out said transformation at said runtime of a program in said source format.